

# Change Order

No. 3

Date of Issuance: January 2, 2014

Effective Date: January 2, 2014

Project: Turquoise Trail Well 2 and Well 3	Owner: Hopi Tribe	Owner's Contract No.: EA 11-12
Contract: EA 11-12, Turquoise Trail Wells #2 and #3		Date of Contract:
Contractor: Yellow Jacket Drilling Services		Engineer's Project No.: PH 10-E37 and PH 04-S63

The Contract Documents are modified as follows upon execution of this Change Order:

Description: Well 3: authorization to re-drill Well 3 at the contractor's cost, increases contract time, acknowledges that contractor releases owner from all claims relating to contractor's efforts at the original Well 3.

Attachments: (List documents supporting change):

Change Order #3 - Revised Quantities and Totals

Change Order 3 Conditions

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price:  \$ <u>2,249,933.70</u>	Original Contract Times: <input type="checkbox"/> Working days <input checked="" type="checkbox"/> Calendar days Substantial completion (days or date): <u>210 days (1/6/14)</u> Ready for final payment (days or date): _____
[Increase] [Decrease] from previously approved Change Orders No. <u>1</u> to No. <u>2</u> :  \$ <u>-36,322.71</u>	[Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____: Substantial completion (days): <u>none</u> Ready for final payment (days): <u>none</u>
Contract Price prior to this Change Order:  \$ <u>2,213,610.99</u>	Contract Times prior to this Change Order: Substantial completion (days or date): <u>210 days (1/6/14)</u> Ready for final payment (days or date): _____
[Increase] [Decrease] of this Change Order:  \$ <u>0.00</u>	[Increase] [Decrease] of this Change Order: Substantial completion (days or date): <u>+104 days</u> Ready for final payment (days or date): _____
Contract Price incorporating this Change Order:  \$ <u>2,213,610.99</u>	Contract Times with all approved Change Orders: Substantial completion (days or date): <u>314 days (4/20/14)</u> Ready for final payment (days or date): _____

RECOMMENDED:

By: AEH/m  
Engineer (Authorized Signature)

Date: 1-2-14

Approved by Funding Agency (if applicable): \_\_\_\_\_

ACCEPTED:

By: \_\_\_\_\_  
Owner (Authorized Signature)

Date: \_\_\_\_\_

ACCEPTED:

By: \_\_\_\_\_  
Contractor (Authorized Signature)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## CHANGE ORDER #3 - REVISED QUANTITIES AND TOTALS

HOPI TRIBE  
TURQUOISE TRAIL WELL 2 AND WELL 3  
PH 04-S63, PH 08-T38, PH 10-E37, and PH 11-E55 / EA 11-12  
January 2014

### SCHEDULE A (WELL 2)

Yellow Jacket Drilling Services

Item	Description	Estimated Quantity	After Change Order #1	After Change Order #2	After Change Order #3	Units	Unit Price	Original Bid Price	Change Order #1 Total	Change Order #2 Total	Change Order #3 Total
1	Mobilization/demobilization/site prep	1	1	1	1	Lump sum	\$80,700	\$80,700	\$80,700	\$80,700	\$80,700
2	Drill surface casing borehole 34-inch diameter	40	40	40	40	Linear feet	\$410	\$16,400	\$16,400	\$16,400	\$16,400
3	Install and Grout 20-inch surface casing	40	40	40	40	Linear feet	\$169	\$6,760	\$6,760	\$6,760	\$6,760
4	Drill 9-7/8-inch diameter pilot hole and collect samples	2,470	2,470	2,470	2,470	Linear feet	\$54	\$133,380	\$133,380	\$133,380	\$133,380
5	Conduct geophysical/lithologic logging	1	1	1	1	Lump sum	\$26,160	\$26,160	\$26,160	\$26,160	\$26,160
6	Collect water samples and perform water quality testing										
	6A. D Aquifer Zone	1	1	1	1	EACH	\$19,150	\$19,150	\$19,150	\$19,150	\$19,150
	6B. N Aquifer Zone	3	3	3	3	EACH	\$19,150	\$57,450	\$57,450	\$57,450	\$57,450
6-1	Additional Airlifting Hours for N Aquifer Zones		30	30	30	hours	\$550		\$16,500	\$16,500	\$16,500
7	Lost Circulation	8	0	0	0	Hours	\$550	\$4,400	\$0	\$0	\$0
8	Ream pilot hole to 18-inch diameter from surface casing to total depth	2,470	2,180	2,180	2,180	Linear feet	\$74	\$182,780	\$161,320	\$161,320	\$161,320
9	Install 12-inch blank well casing	2,005	1,697	1,697	1,697	Linear feet	\$144	\$288,720	\$244,368	\$244,368	\$244,368
10	Install 12-inch well screen	500	485	485	485	Linear feet	\$204	\$102,000	\$98,940	\$98,940	\$98,940
11	Filter Pack	540	495	495	495	Linear feet	\$47	\$25,380	\$23,265	\$23,265	\$23,265
12	Filter Pack Seal Installation	25	25	25	25	Linear feet	\$44	\$1,100	\$1,100	\$1,100	\$1,100
13	Sanitary seal – grout	1,945	1,660	1,660	1,660	Linear feet	\$17	\$33,065	\$28,220	\$28,220	\$28,220
14	Well development by airlift and swabbing	36	36	36	36	Hours	\$550	\$19,800	\$19,800	\$19,800	\$19,800
15	Well Disinfection	1	1	1	1	Lump Sum	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
16	Well video, plumbness and alignment test	1	1	1	1	Lump sum	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500
17	Furnish/Install/Remove test pump	1	1	1	1	Each	\$76,900	\$76,900	\$76,900	\$76,900	\$76,900
18	Well development by pumping	24	24	116	116	Hours	\$475	\$11,400	\$11,400	\$55,100	\$55,100
19	Well pump testing	72	72	24	24	Hour	\$475	\$34,200	\$34,200	\$11,400	\$11,400
20	Water quality analyses	1	1	1	1	Lump sum	\$3,800	\$3,800	\$3,800	\$3,800	\$3,800
21	Well abandonment	2,510	2,510	0	0	Linear feet	\$1	\$2,510	\$2,510	\$0	\$0
22	Record Drawings	1	1	1	1	Lump sum	\$500	\$500	\$500	\$500	\$500

\* Corrected value (Does not match contractor's Bid Schedule)

CONSTRUCTION SUBTOTAL SCHEDULE A \$1,138,555.00

\$1,074,823.00 \$1,093,213.00 \$1,093,213.00

**SCHEDULE B (WELL 3)**

Item	Description	Estimated Quantity	After Change Order #1	After Change Order #2	After Change Order #3	Units	Unit Price	Total Price	Change Order #1 Total	Change Order #2 Total	Change Order #3 Total
1	Mobilization/demobilization/site prep	1	1	1	1	Lump sum	\$75,700	\$75,700	\$75,700	\$75,700	\$75,700
2	Drill surface casing borehole 34-inch diameter	40	40	40	40	Linear feet	\$410	\$16,400	\$16,400	\$16,400	\$16,400
3	Install and Grout 20-inch surface casing	40	40	40	40	Linear feet	\$169	\$6,760	\$6,760	\$6,760	\$6,760
4	Drill 9-7/8-inch diameter pilot hole and collect samples	2,470	2,470	2,470	2,470	Linear feet	\$54	\$133,380	\$133,380	\$133,380	\$133,380
5	Conduct geophysical/lithologic logging	1	1	1	1	Lump sum	\$26,160	\$26,160	\$26,160	\$26,160	\$26,160
6	Collect water samples and perform water quality testing										
	6A. D Aquifer Zone	1	1	0	0	EACH	\$17,150	\$17,150	\$17,150	\$0	\$0
	6B. N Aquifer Zone	3	3	3	3	EACH	\$17,150	\$51,450	\$51,450	\$51,450	\$51,450
6-1	Uranium and Gross Beta water quality analysis			2	2	EACH	\$230			\$460	\$460
7	Lost Circulation	8	8	0	0	Hours	\$550	\$4,400	\$4,400	\$0	\$0
8	Ream pilot hole to 18-inch diameter from surface casing to total depth	2,470	2,470	2,470	2,470	Linear feet	\$71	\$175,370	\$175,370	\$175,370	\$175,370
9	Install 12-inch blank well casing	2,005	2,005	2,005	2,005	Linear feet	\$142	\$284,710	\$284,710	\$284,710	\$284,710
10	Install 12-inch well screen	500	500	500	500	Linear feet	\$204	\$102,000	\$102,000	\$102,000	\$102,000
10-1	Install 12-inch blank s.s. well casing			80	80	Linear feet	\$338			\$27,000	\$27,000
10-2	12-inch blank s.s. well casing delivery			1	1	Lump sum	\$5,800			\$5,800	\$5,800
11	Filter Pack	540	540	540	540	Linear feet	\$47	\$25,380	\$25,380	\$25,380	\$25,380
12	Filter Pack Seal Installation	25	25	25	25	Linear feet	\$44	\$1,100	\$1,100	\$1,100	\$1,100
13	Sanitary seal – grout	1,945	1,945	1,945	1,945	Linear feet	\$17	\$33,065	\$33,065	\$33,065	\$33,065
14	Well development by airlift and swabbing	36	36	36	36	Hours	\$550	\$19,800	\$19,800	\$19,800	\$19,800
15	Well Disinfection	1	1	1	1	Lump Sum	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
16	Well video, plumbness and alignment test	1	1	1	1	Lump sum	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500
17	Furnish/Install/Remove test pump	1	1	1	1	Each	\$63,900	\$63,900	\$63,900	\$63,900	\$63,900
18	Well development by pumping	24	24	24	24	Hours	\$475	\$11,400	\$11,400	\$11,400	\$11,400
19	Well pump testing	70	70	70	70	Hour	\$475	\$33,250 *	\$33,250	\$33,250	\$33,250
20	Water quality analyses	1	1	1	1	Lump sum	\$3,800	\$3,800	\$3,800	\$3,800	\$3,800
21	Well abandonment	2,510	2,510	0	0	Linear feet	\$1	\$2,510	\$2,510	\$0	\$0
22	Record Drawings	1	1	1	1	Lump sum	\$500	\$500	\$500	\$500	\$500

\* Corrected value (Does not match contractor's Bid Schedule)

CONSTRUCTION SUBTOTAL SCHEDULE B	\$1,100,185.00 *	\$1,100,185.00	\$1,109,385.00	\$1,109,385.00
CONSTRUCTION TOTAL SCHEDULE A PLUS SCHEDULE B	\$2,238,740.00 *	\$2,175,008.00	\$2,202,598.00	\$2,202,598.00
TERO FEE (0.5%)	\$11,193.70 *	\$10,875.04	\$11,012.99	\$11,012.99
TOTAL	\$2,249,933.70 *	\$2,185,883.04	\$2,213,610.99	\$2,213,610.99
CHANGE IN CONTRACT AMOUNT		(\$64,050.66)	\$27,727.95	\$0.00

## Change Order Conditions – Change Order #3

### EA 11-12 Turquoise Trail Well Drilling

January 2, 2014

Yellow Jacket Drilling (YJD) has offered to abandon and re-drill Turquoise Trail Well 3, at their cost. Incorporated into Change Order 3 are the following items relative to the re-drilling:

- YJD is authorized to move over approximately 50 ft, on the existing Well 3 site, and re-drill – at no additional mobilization cost to the owner
- New 24" surface casing – installed at YJD cost with a 36" auger bit
- 22" borehole will be allowed – drilled at YJD cost
- Geophysical/lithologic logging – to be omitted, unless the lithology indicates that the formation depths and intervals are significantly different from the original Well 3 borehole, in which case logging will be needed to confirm the formation depths and intervals, and will be provided at YJD cost
- Zonal sampling – to be omitted
- More aggressive air lifting and well development equipment and methods will be required if a 22" borehole is drilled – well development rig, equipment, and methods to be provided at YJD cost
- Additional air lifting hours – additional hours are expected with the 22" borehole, actual air lifting hours will be compared to those incurred at Well 2 and the number of additional hours paid will be negotiable
- Lost circulation – negotiable
- Reaming – at YJD cost
- Casing – original casing from Well 3 to be reused, if not damaged, larger centralizers will be needed, provided at YJD's cost
- Screen – original screen from Well 3 to be reused, if not damaged, larger centralizers will be needed, provided at YJD's cost
- Filter pack – paid on a per foot basis per the contract
- Filter pack seal – paid on a per foot basis per the contract
- Sanitary seal – paid on a per foot basis per the contract
- Well development by pumping – additional hours are expected with the 22" borehole, actual development hours will be compared to those incurred at Well 2 and the number of additional hours paid will be negotiable
- Well abandonment – the original Well 3 is to be abandoned at YJD cost, per the specifications
- Contract time – to be extended 104 days
- Liquidated damages - \$300/day per the original agreement
- Stainless Steel blank casing – 40 LF to be installed at Well 3 as a tail piece, paid by owner
- Schedule – YJD authorized to commence re-drilling as soon as possible

Also acknowledged by this change order is that Yellow Jacket Drilling releases and indemnifies the Owner, the Hopi Tribe, from any and all claims and/or requests for payment arising from the drilling and attempt at construction of the original Well 3 borehole – including, but not limited to, contractor's attempts at fishing for tremie pipe, installation and removal of well screen and casing, drilling and reaming of the borehole, installation of surface casing, abandonment of the borehole, etc. For the original Well 3 borehole, the Owner will make payment for the zonal sampling of the N aquifer, the geophysical logging, and for the 80 LF of blank stainless steel casing. All other costs in relation to the original Well 3 borehole are to be borne solely by the contractor.

Also acknowledged by this change order is that the re-drilled Well 3 is to be completed by YJD per the contract documents, specifications, and any executed change orders.

RECOMMENDED:

ACCEPTED:

ACCEPTED:

AEH

Engineer

\_\_\_\_\_

Owner

\_\_\_\_\_

Contractor

1-2-14

Date

\_\_\_\_\_

Date

\_\_\_\_\_

Date